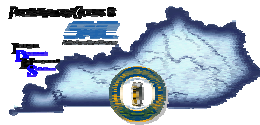# KENTUCKY UCJIS
BOOKING PROCESS WHITE PAPER

Unified Criminal Justice Information System (UCJIS)
Strategic Alliance Services Request
For the Commonwealth of Kentucky

Prepared for:

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1.0 EXECUTIVE SUMMARY

One of the most significant issues facing the Commonwealth of Kentucky Unified Criminal Justice Information System's (KY UCJIS) effort is its ability to define and deploy an efficient, technology-enabled booking process. Although the booking process may appear to be a minor process in the broader integrated justice scope, it is one of the most important, not only as a convergence point of critical data but also as the point of introduction of an inmate into the criminal justice system.

The "tweaking" of a business process or the introduction of new technologies does not necessarily translate to an overall process improvement. Process improvement comes from an organized and focused effort that considers all aspects of a business process, identifies key areas for improvements, and ultimately defines the technology required to complement and enable the improved process. Finally, there are two other considerations to be made. The first consideration is the integration of the various enabling technologies. This involves a determination of whether these systems stand alone, whether they are integrated applications that must be modified and integrated to appear as one, or whether they are integrated systems that must be tied together solely to share data. The second consideration is the change management impacts of the process improvements, and the resulting cultural, political, financial, and performance management implications.

In some jurisdictions the booking process is currently undergoing process improvements and is already enabled by technology. For example, Jefferson County is in the process of organizing a pilot of automated citations and warrants. In addition, the Commonwealth has standardized its citation form in an attempt to create a common document that applies across counties. About 75 percent of Commonwealth jails have acquired Jail Management Systems (JMS). The Kentucky State Police (KSP) have also provided most of the jails with digital live-scan fingerprint systems by Printrak. In all, 95 machines have been deployed to most of the 83 jails and to some other law enforcement agencies. Currently, 11 additional jail sites are preparing to receive live-scan devices. These live-scan devices are used to capture and store fingerprints digitally rather than using ink. They are input devices to the KSP and Commonwealth's Automated Fingerprint Identification System (AFIS) and, therefore, help automate the capture and classification of fingerprints and the positive identification of suspects. The Commonwealth's AFIS then feeds the fingerprint information to the Federal Bureau of Investigation (FBI) AFIS. However, to ensure full compliance with digital fingerprint capture and the recommended process, 100 percent of suspects must be fingerprinted using live-scan technology.

The approach used by the KY UCJIS Team to review and make recommendations to the booking process was one of exploration, discovery, and recommendation. We considered the issues identified above, as well as other questions that would impact the overall effectiveness of the process. We visited eight jails in the Commonwealth, walking through the booking process at each facility. We also considered information found through research and other similar engagements. We contacted other states where the law enforcement activities and processes are considered effective (based on their efficient use of technology and the visibility of "emerging common practices" within the states' business practices). Furthermore, we considered the current business processes, available technology, and culture within the Commonwealth, as well as the availability of technology. Finally, we considered the demographics throughout the Commonwealth of Kentucky, which may impact the effectiveness of a specific scenario.

The result of this approach was the identification of three common, existing booking process scenarios within the Commonwealth:

1. A law enforcement officer-centric solution wherein the arresting official is responsible for the completion of a paper citation and the fingerprinting of the suspect

2. A jailer-centric solution wherein an officer-created paper citation is entered into the JMS and the digital fingerprinting of the suspect (utilizing the live-scan device) is performed by the jail clerk

3. A jailer-centric solution wherein no fingerprinting occurs

The KY UCJIS Team's research provided the ease for the development of the recommended process. It enhances the existing process with efficiency and builds up the current technological base to eliminate existing stovepipes. Additionally, new technology is introduced to enable currently manual processes.

In the interest of complementing public safety with an efficient process achieved through technology, we recommend the adoption of a jailer-centric solution that is similar in nature to one of the most common business processes throughout the Commonwealth, but greatly enhanced through technology and integration. Our recommendation features an officer-created electronic citation (e-citation) that feeds information to the JMS and live-scan, and the capture of digital fingerprints by the jail clerk. This process is defined more thoroughly in Section 6.0 of this document.

This improved booking process is effective in its business process, optimizes the efficiency of the personnel involved in the process, and balances any additional work effort with process improvement, thereby lessening the overall effort required for all parties involved. Furthermore, the revised booking process is enabled by technology, yielding a business process that provides the end-user with integrity in both process and information.

To create a successful business process, the KY UCJIS Team has recommended a booking procedure wherein the business process is regarded as a **partnership** among the key stakeholders involved. The recommended process identifies the KSP as the stewards of the booking process with support required from the jailers in its execution. KSP and the jailers are therefore jointly responsible for the implementation and ownership of the process. That is to say, KSP is responsible for the overall management of the fingerprinting process including such aspects as training, distribution of machines, and maintenance. The jailers are accountable for the execution of the process, the actual "taking" of the prints with live-scan. The recommended process balances the efficient use of the human resources required to build a criminal case with the need to return law enforcement agents back to their duties as quickly as possible. Finally, it provides for efficiency in business process and technology, thereby, increasing productivity and saving time and dollars.

Successfully implementing this jailer-centric recommendation is dependent upon completion of several critical success factors (CSFs). The CSFs are described in detail in Section 7.0 of this document and include the following:

*   The creation of an e-citation system

*   Full implementation of live-scan technology in all jails

*   The thorough training of all jail clerks in the Commonwealth

- The creation of a data exchange infrastructure between key information systems within the process: e-citation, JMS, live-scan, AFIS, and Criminal History Records System (CHRS)

- The eventual creation of a wireless data communications infrastructure to support the real-time population of the JMS and live-scan/AFIS with e-citation system information from a mobile computing device (MCD) Unit[1]

- The development of an interface between AFIS and the JMS

- The creation of a performance-based paradigm to ensure the successful conduct of stakeholder roles within the recommended process

- Written and agreed upon service-level agreements between jailers and KSP

- The creation of a change management plan

- The creation of a training plan

- The development of marketing communications to achieve buy-in from the stakeholders

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[1] Not required for the initial PC/Desktop e-citation application.

2.0 OUR APPROACH

In October 2000 the Commonwealth of Kentucky employed the services of the joint KY UCJIS Team of consultants from Science Applications International Corporation (SAIC), PricewaterhouseCoopers (PwC), and Intelligent Document Management Solutions (IDMS), termed the KY UCJIS Team, to assist in creating a more orchestrated effort and focused approach to an integrated and coordinated KY UCJIS effort. As part of this effort, the KY UCJIS Team has undertaken a review of the existing booking processes across the Commonwealth and made suggestions for Commonwealth-wide processes.

To assess the Commonwealth's booking process, the KY UCJIS Team employed a systematic approach involving the steps listed below and described in the following subsections:

- Commonwealth Detention Facility Site Visits
- Facility Personnel Interviews
- External Validation: Emerging Common Practices
- External Validation: External Law Enforcement Agency Interviews

2.1 Commonwealth Detention Facility Site Visits

The KY UCJIS Team visited eight detention facilities of various sizes, business processes and geographic locations across the Commonwealth. The facilities visited were Woodford, Franklin, Kenton, Pulaski, Warren, Daviess, Jefferson, and Madison County jails. Locations were selected by Mr. Paul Embley (KY UCJIS Project Manager) and Mr. Harold Taylor (President, Kentucky Jailer's Association). These selections provided a diversity of facility type, size and location.

At each location, the visiting KY UCJIS Team walked through the facility's booking process. The KY UCJIS Team also visited various sections of the facilities including: the booking, Breathalyzer, and inmate holding areas, and the pantry and personnel offices. During the walk-throughs, the KY UCJIS Team also observed the duties of the staff. The primary focus of the KY UCJIS Team was on the intricacies of the booking process: the actions, owners of each action, data captured, processes used to capture data, data hand-off, support technology, and the areas for improvement.

The most critical aspect of each visit was a review of the fingerprinting process. This included a demonstration of the live-scan equipment and its association with AFIS, and an explanation of the fingerprint classification and suspect identification process. Additionally, the visiting KY UCJIS Team observed the JMS applications and their functionality.

2.2 Facility Personnel Interviews

During the facility walk-through, the visiting KY UCJIS Team interviewed facility personnel involved in the booking process, asking specific questions about the process. The KY UCJIS Team also inquired into issues related to the booking process as these emerged, specifically, the completion of the Uniform Citation, the fingerprinting process and the use of the JMS. The main focus was the dilemma of which agency [the law enforcement agency (LEA) or the jail] involved in the booking process was responsible for the performance of specific aspects of the process and the challenges faced therein.

In addition, the KY UCJIS Team interviewed personnel working within the KSP AFIS Section, and walked through the booking process from their perspective.

2.3   External Validation: Emerging Common Practices

Emerging common practices of booking processes employed by other states were researched through the investigation of similar engagements and via the Internet. The results were used to benchmark the Commonwealth's booking process, and ascertain possible business process improvements and enabling technology that could be implemented. The KY UCJIS Team reviewed data from the following organizations:

- SEARCH – the National Consortium for Justice Information and Statistics
- Information Services, City of Oklahoma
- Idaho Sheriff's Department
- Huntington Police Department, California
- National Center on Institutions and Alternatives
- FCW Government Technology Group
- National Criminal Justice Reference Services

2.4   External Validation: External Law Enforcement Agency Interviews

In order to obtain first-hand knowledge of booking processes in other states, the KY UCJIS Team visited law enforcement agencies outside the Commonwealth of Kentucky. The purpose of these visits was to interview personnel and observe the booking process. The data gathered was used to determine common and alternative processes. KY UCJIS Team members visited or spoke with the following agencies:

- New Jersey State Police
- Woodbury Police Department, Woodbury, New Jersey
- Alexandria City Police, Alexandria, Virginia

3.0 THE *AS-IS* PROCESS[2]

Within the Commonwealth, the booking process varies from jail to jail. The following is a description of the existing booking process across the Commonwealth. It should be noted that in some cases, live-scan devices are used to take electronic fingerprints, and in other cases, fingerprints are rolled with ink.[3]

In general, the booking process starts at the time of arrest[4]. The arresting law enforcement officer takes the suspect into custody. The officer transports the suspect to the jail[5] that serves the jurisdiction of the arrest. Upon arrival at the jail, the arresting officer and the suspect enter through the "sally-port," a garage adjacent to the jail, and the officer secures his/her weapons either in the weapons lock box located in the "sally-port," or in his/her police vehicle. If needed, the arresting officer then performs the Breathalyzer test on the suspect. The suspect waits either in the Breathalyzer room or the booking area while the officer writes up the uniform citation.

In practice, once the arresting officer gives the completed citation to the jail clerk, responsibility over the inmate transfers to the jail clerk who then enters information from the citation, as well as other pertinent inmate information, into the JMS[6]. Many jail clerks, however, will not accept responsibility until all JMS data entry is complete. The decision of whether or not to fingerprint the suspect now occurs.[7] The KY UCJIS Team identified three possibilities in this regard, described in the following subsections.

1. **No Fingerprints Captured**

    The suspect (now referred to as the inmate) is searched, dressed in jail garments and placed in a holding cell. No fingerprints are captured within this scenario.

    - **Issues**
        - » Lack of fingerprints results in no criminal history record, which goes against fundamental KY UCJIS objectives. This becomes an issue of public safety and law enforcement officer safety.
        - » Lack of capturing fingerprints results in non-performance of a background check and identity confirmation. The officer or jailer would not know of any existing criminal

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[2] A diagram of the *As-Is* Process may be found as Appendix B, Exhibit B-1.

[3] According to KSP personnel, it is expected that the rollout of live-scan devices to all jails in the Commonwealth will be complete within the year.

[4] The booking process may also start with the issuance of a warrant at the Commonwealth attorney's or County attorney's office.

[5] In some areas the officer transports the suspect to the local police department.

[6] In the Commonwealth of Kentucky there are multiple JMS. The JMS used depends on the jail clerks and the telecommunications provider. The two primary JMS are the Law Enforcement Management Systems (LEMS) and the Sheriffs Office Maintenance System (SOMS). The LEMS software is used by approximately 25 percent of the operating jails. The SOMS software is used by approximately 50 percent of the jails. The remaining 25 percent of jails use either a homegrown system or the Victim Information and Notification Everyday (VINE) system. The VINE system was not designed as a JMS and does not contain all the necessary information to manage a jail. The State Identification Number (SID) is not captured in either LEMS or SOMS. Each system creates a unique identification number for the inmate.

[7] This is an ongoing dialogue between the jailers and KSP, which will be discussed later in this document.

history or outstanding warrants. Further, the jailer could have inaccurate identification information on the inmate.

» The absence of an accurate criminal history record results in prosecution and court officials not having the information required to make informed bail, charge, and sentencing recommendations.

» A criminal case is weakened without unique biometric evidence.

2. Fingerprints Captured through Live-Scan Technology

The arresting officer or jail clerk enters the necessary information into the live-scan device. Each finger is scanned and verified for fingerprint quality in order to ensure that the fingerprint can be properly classified by AFIS. Once captured, the fingerprints are interfaced directly into the AFIS system for digital classification.

- **Issues**

  » A user has the ability to override the alerts for print quality on the live-scan devices – bad prints potentially weaken criminal cases.

  » Without adequate live-scan training, the full effectiveness of using digital fingerprint technology will not be realized.

  » The live-scan/AFIS interface has neither the complete set of features nor full functionality to meet the jailers' requirements.

3. Fingerprints are Captured with Ink and Paper

Fingerprints can be taken at various points using this method, sometimes even on the trunk of the police vehicle before the suspect is placed in the police vehicle. In some locations where there are no live-scan devices this process is still in practice. In general, ink fingerprints are captured at the jail. The arresting officer "rolls" the fingerprints of the suspect using an arrest card and an inkpad. The arresting officer leaves the jail after the fingerprinting is complete. The fingerprint cards are forwarded to KSP, where they are converted to digital format and entered into AFIS.

- **Issues**

  » Capturing a set of fingerprints either manually or digitally takes five to ten minutes on average.[8] The manual capture of fingerprints with ink and paper is time consuming since regulation dictates that KSP receives three fingerprint cards. With live-scan technology only one set of prints needs to be captured, yielding as many hardcopies as needed.

  » The use of an arrest card and inked fingerprints does not provide immediate feedback regarding a suspect's prior involvement in the justice system.

  » As the Commonwealth moves to digital classification of fingerprints, the capture of fingerprints on card and ink requires an additional step of scanning the fingerprint cards into the AFIS system in order to convert them into digital prints. The live-scan devices are currently not integrated with the JMS applications.

  » Limited data is sent back from the AFIS system. Additional data could greatly assist the jailer.

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[8] Data gathered from *Immigration and Naturalization Service Biometric Report*.

» The manual fingerprinting process is labor-intensive and subject to poor quality results. Often manual fingerprinting requires rework. Fingerprints could potentially become smudged either in the process of fingerprinting or if a suspect deliberately resists attempts to fingerprint them. This is further complicated in cases where the suspect is arrested and fingerprinted, released, and the fingerprint card is then rejected. It becomes difficult to take new fingerprints if the suspect's whereabouts are unknown. According to the jail clerks, the FBI rejects a substantial number of manually obtained fingerprints for quality reasons

Continuing the process, after the inmate has been booked, he/she then undergoes a physical "pat down" search while still in the general booking area. Any personal property is entered in the property log and kept in a property storage area at the jail, for return to the inmate upon release. Finally, a receipt (called a Body Sheet) is created for the inmate, and the inmate is taken to a holding cell.

Based upon the volume of total fingerprints captured, the general practice throughout the Commonwealth has the jailer capturing the subject's fingerprints on a live-scan machine. However, considering each county as a singular entity, there are numerous exceptions. For example, in Woodford County Jail, the jail clerk utilizes the live-scan device to fingerprint the suspect after he/she receives the citation from the arresting officer. The officer then returns to patrol. In the Bowling Green Detention Center, Pulaski County Detention Center, and Madison County Jail, the arresting officer, not the jail clerk, fingerprints the suspects. In other counties, fingerprints are still captured using paper and ink. Fingerprinting responsibility in these counties varies between the jailers and the arresting officers.

The KY UCJIS Team discovered there are several reasons why live-scan use is not universal across the Commonwealth. These reasons include:

- Live-scan systems are not fully implemented across the Commonwealth
- Jailers have not fully realized the process-wide impacts and benefits of digitally captured fingerprints
- Live-scan implementation was performed without an organized approach to end-user training and follow-up training, including identification of who will be trained and how they will be trained
- Inadequate training provided for live-scan users. No formal training plan, on-going training plan, or follow-up support plan has been seen
- Lack of consideration or plan for change management issues
- Within the same jurisdiction similar agencies perform different functions within the booking process

In addition, it is not within the current process for the jail clerk to fingerprint the detainees at the time of release. As a result, it is often the case in many jails for a person to be released into the public without capturing their fingerprints.

Currently in Kentucky there is an ongoing dialogue between KSP and jailers over the allocation of fingerprinting responsibility. The jailers are concerned that they do not have enough manpower or funds to perform this function.

4.0 BOOKING PROCESS ALTERNATIVES

The KY UCJIS Team evaluated two booking process alternatives described in the following subsections:

- Officer-centric booking that occurs at an induction facility

- Jailer-centric booking that occurs at a jail

4.1   Officer-Centric Booking Process Occurs at an Induction Facility

With this alternative, the suspect is arrested by a law enforcement officer and taken to an induction facility within jurisdiction of the arrest (perhaps within a police department). The induction facility is separate from the jail. Here, the Breathalyzer test is performed, the e-citation completed, information from the e-citation is transferred to the JMS (located at the jail) and into the live-scan device, and the arresting officer captures fingerprints using a live-scan device. An officer then transfers the inmate to the jail. The induction facility, because it is a law enforcement-managed facility, provides full control to the arresting officer of the fingerprinting process. The officer is the one responsible for building his criminal case and he/she maintains control of the evidence at the induction facility.

The induction facility option is problematic for the following reasons:

- The use of an induction facility involves the arresting officer physically transporting the suspect to a location other than the jail where the suspect may ultimately be held for booking. This process extends the period of time the suspect is in the custody of the arresting officer, increasing the exposure of the arresting officer to the threat of violence and the possibility of the suspect's escape.

- The increased time spent by the arresting officer between the two locations in order to complete the booking process results in diminished police man-hours spent patrolling the community.[9] The maintenance of maximum police presence in the streets of the Commonwealth is a priority for all LEAs in the Commonwealth. The use of an induction facility may adversely affect the efficiency of the booking process since transporting the suspect means that more time will be spent on the overall process.

- The use of an induction facility requires additional movement of the suspect by the police officer. The suspect is taken from the police vehicle to the induction facility, and from the induction facility back to the police vehicle, thereby, increasing the risk to officer-safety.

- All law enforcement officers will have to be trained to take digital fingerprints using live-scan technology. This represents a considerable financial outlay on the part of the Commonwealth. In all 4,700 law enforcement officers that would need to be trained.

- The induction facility option also involves considerable financial investment of building, human resources, and equipment, as several of these facilities would have to be set up in the various jurisdictions throughout the Commonwealth.

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[9]   The increase in time is dependent upon the location of the arrest and the additional distance an officer would travel to an induction facility, rather than directly to the jail facility.

4.2   Jailer-Centric Booking Process Occurs at a Jail

With this alternative, the suspect is arrested by the arresting officer and immediately taken to a jail within jurisdiction of the arrest. At the jail the Breathalyzer test is performed and the arresting officer completes the e-citation in one of the four ways described in Section 4.3.1. After the e-citation is completed, the information is electronically sent to the JMS. The jail clerk then validates the citation data in JMS and adds any jail-specific data before saving it in JMS. The arresting officer leaves the jail. The jail clerk continues the booking process by taking the suspect's fingerprints using the live-scan machine, which sends the data to the AFIS.

This alternative could also leverage the capture of mugshot photographs, which currently takes place at the jail and resides in the JMS. The mugshots are a valuable piece of biometric data. With this alternative, mugshots can be associated with the fingerprint using the SID. This photograph can then be made available to authorized criminal justice agencies through the KY UCJIS architecture and can be used to populate the Criminal History system, as well as be provided to the FBI. Returning the SID to the JMS would also allow the jails to have an accurate criminal history key value associated with the individual stored in their system.

4.3   Key Considerations

Listed below are three aspects of the current booking process common to both alternatives. Each aspect is discussed in the following subsections:

- Electronic Uniform Citation
- Data Entry into JMS
- Use of live-scan technology and alternative locations

4.3.1   Electronic Uniform Citation

The completion of an e-citation by the arresting officer addresses one of Kentucky's UCJIS vision objectives – reduction of redundant data entry points and ensures that data is captured at the earliest opportunity. As the justice agent with whom the individual has the initial contact with the Kentucky justice system, the arresting officer is best positioned to complete the e-citation.

Several options exist by which the e-citation can be completed. Each option achieves the goal stated above. The completion of the e-citation also allows for efficiency within the JMS process – another UCJIS vision goal. The e-citation can electronically populate the required fields in the JMS (with validation of the data by the jail clerks). This would reduce the manpower expenditure on this exercise by eliminating double data entry. Finally, the completion of the e-citation enables an upload of citation information into the live-scan device, which will forward this information to the AFIS.

- **Electronic Citation Completed Using an MCD**

    With this approach an e-citation requires the arresting officer to have access to an MCD, a small, portable computer used to capture citation data. The citation information is then electronically sent for use in the JMS and the live-scan systems. The MCD allows for flexibility since the arresting officer has the ability to utilize the device wherever required.

- **Electronic Citation Completed Using the Live-Scan Device**

  With this approach, the arresting officer completes the e-citation using the live-scan device. The officer enters the required fields prior to taking the fingerprints on the same machine. The benefit is single entry of citation data and immediate entry of similar data into the live-scan/AFIS.

- **Electronic Citation Completed Using a Personal Computer (PC)[10]**

  With this approach, the arresting officer completes the e-citation on a PC that is located at the jail facility and has been furnished with e-citation form software. The citation information is then electronically sent to the live-scan/AFIS and JMS. This prevents the officer from having to carry their own device for capturing the citation information, but makes them subject to the state of technology at a given time at the jail facility. Using a PC e-citation eliminates the need for a wireless data communications network and could expedite e-citation implementation.

- **Semi-Electronic Process**

  Although the e-citation is most desirable, an option also exists for a semi-electronic process. In this scenario the arresting officer completes the citation on paper, passes it to the jail clerk who uses it to complete the required fields in the live-scan/AFIS or JMS. The live-scan/AFIS or JMS would then forward the required data to other systems.

4.3.2 Data Entry into JMS

Currently, the JMS is an independent system within each jail with no interfaces to other systems. Most of the citation information is input into the JMS and then re-entered into the live-scan/AFIS. This redundant data entry is an inefficient use of the jailers' time and resources. Looking at alternatives, saving time in JMS data entry increases efficiencies in the booking process in general and for the jailers in particular.

4.3.3 Use of Live-Scan Technology and Location Alternatives

The electronic fingerprinting of the suspect by the jail clerk, using live-scan, allows for the fulfillment of another KY UCJIS goal – the existence of data built upon uniquely identified individuals and events – in this case, an individual with a charge identified by a quality fingerprint. The jail clerks are best positioned to take the electronic fingerprints using live-scan technology for the following reasons.

Approximately 330 jail clerks would require live-scan technology training compared to approximately 4,700 law enforcement agents

(Note: Jail statistics are based upon 83 jails with 4 jail clerks at each jail. LEA statistics are based upon rough estimates from KY UCJIS project personnel of approximately 700 KSP officers and 4000 County and local officers who would be potentially capturing fingerprints)

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[10] The e-citation data, citation number, and SID must be closely associated in order to maintain process integrity. Printed copies of the citation could be made available to existing processes.

- The jail clerks can be trained to take high quality fingerprints using the live-scan. Speed and accuracy of taking the fingerprints will improve as expertise is acquired

- The jail clerks' completion of the electronic fingerprints would also facilitate returning the arresting officer to his/her patrol of the community as soon as possible after making the arrest, thereby increasing police officer presence on the streets of the Commonwealth, in the interest of public safety

5.0 ISSUES AND CHALLENGES WITHIN THE CURRENT BOOKING PROCESS

As the KY UCJIS Team conducted the review of the booking process, several issues and challenges within the current booking process became apparent. Prior to the implementation of the new business process and enabling technology, these issues must be addressed. Following are the outstanding issues and the recommended resolutions. These resolutions are made based upon the recommended booking process found in Section 6 of this document.

1. **The Commonwealth has not standardized on a JMS**

   Currently jails primarily use either the LEMS or SOMS JMS to capture and maintain pertinent information on each inmate. In a limited number of jails, no JMS exists. These jails use either the VINE system, homegrown application, or no technology exists to support their JMS functions. The capturing and maintenance of pertinent information is a critical step in the booking process. As the Commonwealth moves forward with its UCJIS effort, it would become a burdensome task to develop interfaces between a plethora of jail management systems.

   The KY UCJIS Team recommends that the Commonwealth UCJIS management and the key decision makers within the jails meet and decide on the use of no more than two JMS.

2. **Duplication of information input into JMS and AFIS (via live-scan technology)**

   A subset of the information currently captured in the SOMS and LEMS JMS is required by the live-scan digital fingerprint and AFIS systems. As a result of their non-connectivity, duplication of the data entry effort is required to ensure complete data capture in each of the support applications.

   Creation of a two-way interface between the JMS and live-scan/AFIS systems…would result in a reduction of approximately 7,100 man-hours

   The KY UCJIS Team recommends the creation of a two-way interface between the JMS and live-scan/AFIS systems. This would result in timesaving of over 5 minutes per suspect. Based up on the number of fingerprints captured during the 2000 calendar year,[11] this would result in an annual timesaving of approximately 7,100 man-hours.

3. **Duplication of Citation Entry**

   The current booking business process begins with the creation of a manual (paper) citation. Upon completion of the citation and other paperwork by the arresting officer, the information is handed over to the jail clerk, at which time the suspect is considered transferred to the jail.

   An e-citation to JMS interface would result in a 7,100 man-hour reduction in the jailer's workload. KSP will also experience a man-hour reduction in the time required to complete citation data entry

   The KY UCJIS Team recommends the development of an automated citation system that will run on a PC. Although this is not the final solution for an e-citation system, it does provide for the electronic capture and transmission of citation

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[11] Total fingerprints during the 2000 calendar year were 85,315 based upon the KSP live-scan 2000 bookings report.

information for all arrests.[12] This PC application would provide for the capture and printing of the citation information and the direct interface of this information into the JMS and live-scan/AFIS. An automated citation could also result in man-hour reduction in a significant data entry effort of the citation information at KSP.

4. Lack of consensus between Jailers and KSP on allocating responsibility for fingerprinting

Throughout the Commonwealth, there is a lack on consensus on roles and responsibilities within the booking process. This booking process white paper provides the Commonwealth with the KY UCJIS Team's recommended process. The Commonwealth will need to develop a statewide implementation plan that incorporates a significant change management effort into the entire project lifecycle. This situation must be addressed at the highest levels, in a manner that takes into account the resistance issues that can be anticipated by all affected stakeholders.

The KY UCJIS Team recommends the development of a complete implementation plan for both the process and the technology. The plan must be complete in that it must address every jail location throughout the Commonwealth. Further, it must address all issues regarding the implementation of the new business process and the technologies that accompany and enable it. Organization of this effort must include a comprehensive training plan that addresses complete initial training, annual refresher training, and a plan for increasing skills and continuing education on related technologies and procedures.

5. LEMS does not allow for the entry of the complete citation number since it cannot accept alpha characters

This results in an incomplete citation number being entered into LEMS and the inability to exactly match citation numbers in AFIS and LEMS. This runs counter to the KY UCJIS objective of establishing a unique identifier for linking individuals and offenses.

The KY UCJIS Team recommends the review of both the SOMS and LEMS applications to ensure that each captures the information necessary to raise the JMS architecture to KY UCJIS standards. Upon completion of this review, the JMS vendors should be contacted to make immediate and complete modifications to their applications.

6. The lack of complete information being returned from AFIS

The live-scan/AFIS device located in each jail should be modified to return a complete KSP/III Criminal History Report of Arrests and Prosecutions (RAP) and complete biographic data on the suspect to the jail facility. With this information, the jail can be confident of the identity of the suspect and determine the appropriate incarceration decisions. Additionally, this information can be readily available to prosecution and court officials who need it to establish bail, charge, and sentencing recommendations.

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[12] Except for those arrests initiated by a prosecutor's office. These offices could, eventually, join into this process. This would allow for the electronic capture and distribution of all citations resulting in arrest.

6.0 BOOKING PROCESS RECOMMENDATION[13]

The KY UCJIS Team recommends that the booking process be jailer-centric and occur entirely at the jail. The inmate is booked at the jail, with the arresting officer responsible for the completion of the e-citation. The e-citation must be fully complete prior to entry into the JMS. The jailer-centric process will use jail staff to take the electronic fingerprints using the live-scan/AFIS at the jail. The data captured in the e-citation by the PC would be transmitted to the JMS and live-scan/AFIS system[14]. This could be accomplished via direct interface before the jail clerks assume responsibility for the suspect.

- **Arrest of the Suspect** – As in the current process, the officer would arrest a suspect based upon observation of a violation of a specific statute of law. No changes to this activity are made in the new business process.[15]

- **Transporting of the Suspect** – Upon arrest, the officer would transport the suspect to the jail facility. It is the KY UCJIS Team's recommendation that no intermediate facility be used. During our interviews, the officers and jailers both expressed their desire to transport the suspect to the jail where they have the proper facilities to house and restrain a suspect. Movement of the suspect in and out of the cruiser and a facility provides an additional level of risk and opportunity for incident with a suspect. Arresting officers will, therefore, transport the suspect directly to a jail facility and follow the current process of entering the "sally-port," removal of weapons, escort of the suspect into the facility, and conduct of the Breathalyzer test.

- **E-citation** – To begin the capture of UCJIS data, the officer will fill out the citation and other relevant arrest information on an automated citation system. Given that the Commonwealth is currently not in a position to purchase MCD units for all police cruisers and does not have the facilities in place to allow for a statewide wireless data communications network, the KY UCJIS Team recommends the development of a PC-based e-citation system. This system would provide for the capture of all citation information, the printing of hard copy citations and other arrest related documentation. This system could also interface and provide this information to the JMS and live-scan/AFIS via a direct interface.[16] As the Commonwealth moves forward with their UCJIS effort and the development of a data repository, this information could easily be interfaced directly to the UCJIS repository. Over the course of the next several years, specific jurisdictions within the Commonwealth will begin to implement MCD technologies. In these specific cases an alternate process will be implemented to provide for e-citation data capture and transfer.

- **JMS Data Verification and Capture** – Once the arresting officer has completed the entry of the data into the e-citation system, the jailer would have immediate access to this data through their JMS. The jailer would review the data on the JMS, validate its completeness and accuracy, and

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[13] A diagram of the recommended process may be found in Appendix B, Exhibit B-2.

[14] Eventually the MCD would be implemented within the Commonwealth as financial conditions allow.

[15] As part of the Commonwealth's future UCJIS business processes, electronic capture of citation information will occur through the use of MCD technology. This booking process white paper is focused upon a solution that can be implemented by the Commonwealth within the near future.

[16] Providing this data to live-scan/AFIS would also provide it for possible integration directly into the Commonwealth's Record Management System (RMS) and CHRS systems.

then assume responsibility of the suspect. At this point the arresting officer would be freed to return to patrol and the jailer would continue to capture the remaining data required by the JMS. Upon completion of the JMS data entry, information required by the live-scan digital fingerprint machine would be transferred to the live-scan.[17]

- **Digital Fingerprint Capture** – The jailer would use the live-scan system to capture the fingerprints. Data required by the live-scan system and AFIS would be provided to the live-scan device automatically. Jailers would locate and transfer the suspect's citation record, capture the prints digitally, and send the record for classification to AFIS. To lessen the burden of capturing multiple fingerprints, fingerprints would be required for each felony offense, but for misdemeanors only when no fingerprint record exists or where an existing fingerprint record is more than six months old. The AFIS classification process would proceed as it does currently. It is the KY UCJIS Team's recommendation, however, that an interface be developed to the JMS that will provide additional AFIS information to the JMS (as stated earlier) through use of the PES server. The PES server will act as a meeting point between the live-scan and JMS records. Once married they will be forwarded to the AFIS system. This would provide the JMS with information such as the SID, the suspect's name, address and other relevant information. Providing this information to the jailer would supply them with a better identification and background information on the person. This information could also be provided to the JMS via the interface.

- **Other Booking Activities** – In the final stages of the process, the inmate is subjected to a physical search, his/her personal property is entered in the property log, he/she is placed in jail uniform, and he/she is taken to a holding cell.

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[17] If desired and determined more feasible, live-scan data could be populated with the e-citation data transfer. The Commonwealth's two primary JMS systems also capture digital photographs of the subject. As the Commonwealth moves to racial profiling technology, they could expand the JMS interface to include the digital photo.

7.0 CRITICAL SUCCESS FACTORS

The CSFs listed below must be in place in order to successfully implement the jailer-centric booking process at the jail.

1. The development and implementation of the e-citation system within the Commonwealth is critical. The e-citation system is the lynchpin upon which the revised booking process is built, since it is the first point-of-data-capture into the criminal justice system. The e-citation system in the Commonwealth is set up to run on a PC with the ability to interface with the JMS and live-scan/AFIS, thereby reducing redundant data entry.

2. The full implementation of live-scan technology to all jails within the Commonwealth is necessary. This would standardize the method for capturing digital fingerprints and allow for improved quality of fingerprints throughout all jail facilities. The live-scan dimension of the revised process is critical, since it is a part of the vital interface between systems – the e-citation system, JMS and live-scan/AFIS – that results in the entry of data with higher integrity into the UCJIS.

3. The creation of a wireless data communications infrastructure to support the real-time recommended flows of information is vitally important since it enables the population of the JMS and live-scan/AFIS with e-citation information.

4. The development of a return interface between AFIS and the JMS must occur in order to track individuals post-release.

5. Creation of a performance measurement plan to establish standards and to ensure the successful conduct of each stakeholder's roles within the recommended process is also critical. This should be supported by a written service-level agreement between jailers and KSP to formally assign each agency's responsibility within the recommended process.

6. Directly associated with the performance measurement plan is the development of a comprehensive change management plan. This CSF incorporates necessary training initiatives to ensure jailer proficiency using the live-scan technology and to maintain the standards for quality prints.

The fifth and sixth CSFs will work together to create an environment of results-based booking and continuous improvement in booking practices. In addition to training, this change management plan must include a marketing communications component to manage the introduction of the recommended booking process, and assist the stakeholders in understanding and adjusting to their new roles in the process.

8.0 CONCLUSION

The jailer-centric booking process conducted at the jail offers several benefits, mainly the entry of quality data at the earliest opportunity, and the transfer of this quality data throughout the JMS and AFIS systems. The solution also offers specific benefits to various agencies. These benefits are identified in **Exhibit 8-1**.

Exhibit 8-1. Stakeholder Benefits from an Enhanced Jailer-Centric Booking Process

Stakeholder	Benefits Derived from Enhanced Booking Process
Jail	• Reduce jailer time spent on JMS data completion and AFIS data submission by enabling the arresting officer to enter citation information electronically and sending it to JMS. Based upon information from jail visits, this results in an overall timesavings of more than 10 minutes per subject.[18] • Timesaving in submission of hardcopy fingerprint cards. • Reduce time spent on manual data entry, and reduced booking process time through electronic data transfer between citation, JMS and live-scan results. • Provide the jailer with data on a subject that is currently difficult and extremely time-consuming to obtain through electronic return of additional information from the AFIS system. Confirmation of the suspect's name, address and other information will provide the jailers with a broader knowledge base than is currently available.
KSP/ Arresting Officers	• Provide faster, more reliable information into the Criminal History Record through direct input of citation information by arresting officers. • Free officer to return to patrol by enabling the jail clerk to fingerprint the suspect using live-scan, thereby increasing public safety. • Better quality fingerprints when the jail clerk fingerprints suspect using live-scan, which enhances the quality of the officer's case. • Lessen or eliminate the need for the digital transfer process within KSP by fingerprinting of all suspects via live-scan. • More accurate data from source (LEA).
Administrative Office of the Courts (AOC)	• Accurate records to form basis for adjudication. • Capture of the citation information electronically could provide AOC with more timely delivery of citation data. • Return of the SID and related criminal history data would provide the AOC with a more complete record.
KY UCJIS Project	• Accurate data capture at a single point of entry via Electronic citation by arresting officer. • Electronic data transfer between citation and live-scan results in immediate entry of data into AFIS. • Electronic capture and transfer of citation information provides the Commonwealth with the primary link of information capture into its eventual statewide UCJIS repository. • Biometrically supported accurate records.

In order for the jailer-centric solution to work, buy-in and support must be elicited from the major stakeholders: KSP, the jailers and KY UCJIS project management. This may be achieved through the development of a comprehensive marketing and communications plan, highlighting the potential benefits of the key aspects of the solution for each group.

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[18] The timesavings estimate is based on conversations with jail clerks during the jail facility visits.

For KSP, the potential gains include: the ability to directly input data related to the arrested individual in an electronic format that would feed the JMS and live-scan/AFIS systems, the ability to return officers to patrol in a shorter time, the receipt of quality fingerprints captured by the skilled jail clerks, and the reduction in redundant citation data entry.

For the jailers, the creation of an enhanced communications infrastructure within the jails enables the transfer of data between the electronic citation, the JMS and live-scan/AFIS. In addition, jailers would benefit from enhanced biometric data to include mug shots, the ability to utilize AFIS feedback to positively identify individuals after they have been released, and the return of needed RAP sheet information regarding a positively identified individual. An additional benefit to the jailers is elimination of duplicate data entry.

The relationship between the KSP and Jailers would be guided by a performance plan identifying each party's role in the process and setting performance standards for the expected activities of each group.

KY UCJIS would see benefit from the electronic capture and transfer of citation information, which would provide the Commonwealth with the primary link for information capture. Also, KY UCJIS would see improved data entry, resulting in both an increase in quality and completeness of data residing within the UCJIS system, increased officer presence on the streets, and the leveraging of technology to enable public safety.

The jailer-centric booking process conducted in jails offers benefits to stakeholders and agencies in particular and to KY UCJIS as a whole. Its success depends on achieving the buy-in and support of all involved.

Appendix A:
ACRONYMS AND ABBREVIATIONS

AFIS--------------- Automated Fingerprint Identification System

AOC--------------- Administrative Office of the Courts

CSF---------------- Critical Success Factor

CHRS ------------- Criminal History Records System

e-citation --------- Electronic citation

FBI----------------- Federal Bureau of Investigation

IDMS-------------- Intelligent Document Management Solutions

JMS---------------- Jail Management System

KSP---------------- Kentucky State Police

KY UCJIS ------- Commonwealth of Kentucky Unified Criminal Justice Information System

LEA --------------- Law Enforcement Agency

LEMS ------------- Law Enforcement Management Systems

MCD -------------- Mobile Computing Device

PC------------------ Personal Computer

PwC --------------- PricewaterhouseCoopers LLP

RAP --------------- Report of Arrests and Prosecutions

RMS--------------- Record Management System

SAIC -------------- Science Applications International Corporation

SAS ---------------- Strategic Alliance Services

SASR-------------- Strategic Alliance Services Request

SID----------------- State Identification Number

SOMS------------- Sheriffs Office Maintenance System

UCJIS------------- Unified Criminal Justice Information System

VINE -------------- Victim Information and Notification Everyday

Appendix B:
BOOKING PROCESS DIAGRAMS
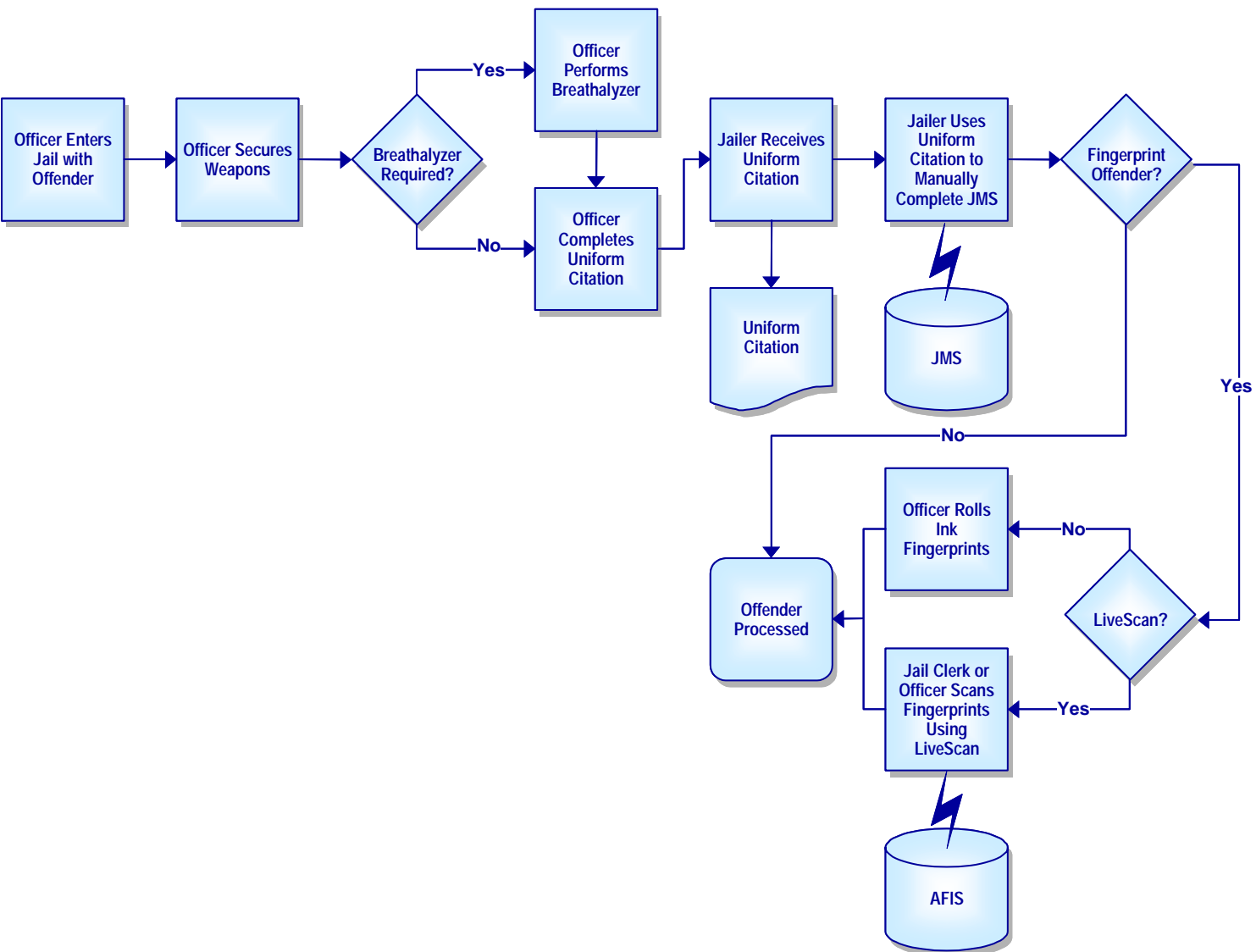
Exhibit B-1. Existing Booking Process

Officer Enters Jail with Offender → **Officer Secures Weapons** → **Breathalyzer Required?**	

Breathalyzer Required?
- Yes → **Officer Performs Breathalyzer**
- No → **Officer Completes Uniform Citation**

Jailer Receives Uniform Citation
- → **Uniform Citation**
- → **Jailer Uses Uniform Citation to Manually Complete JMS** → **JMS**

Jailer Uses Uniform Citation to Manually Complete JMS → **Fingerprint Offender?**
- Yes → **LiveScan?**
- No → **Offender Processed**

LiveScan?
- No → **Officer Rolls Ink Fingerprints** → **Offender Processed**
- Yes → **Jail Clerk or Officer Scans Fingerprints Using LiveScan** → **AFIS**

Exhibit B-2. Recommended Booking Process

```
Officer Enters          Officer Secures          Breathalyzer
Jail with        →      Weapons           →      Required?
Offender

   Yes →  Officer Performs Breathalyzer
                    ↓
   No →   Officer Completes Electronic Citation on MCD or PC and Departs Jail

→  Electronic Citation Data Transmitted to JMS and AFIS
        ↓                    ↓
       JMS                  [to Jail Clerk]
        ↓
       AFIS

→  Jail Clerk Scans Fingerprints Using LiveScan  →  Subject Processed
        ↓
   Fingerprint Card
```

```
┌──────────┐     ┌──────────┐     ┌──────────┐
│ Subject Is│──▶│Officer and│──▶│Breathalyzer│
│ Arrested │     │Subject Arrive│   │Is Performed│
│          │     │at Jail Facility│ │          │
└──────────┘     └──────────┘     └──────────┘
                                         │
                                         ▼
                                  ┌──────────┐     ┌──────────┐     ┌──────────┐
                                  │Electronic │──▶│Jail Captures│──▶│Booking   │
                                  │Citation Is│   │Fingerprints│   │Process Is│
                                  │Completed │     │          │     │Completed │
                                  └──────────┘     └──────────┘     └──────────┘
                                         │
                                         ▼
                                  ╱──────────╲
                                  │Information is│
                                  │Electronically│
                                  │Sent to JMS│
                                  ╲──────────╱
                                         │
                                         ▼
                                  ┌──────────┐
                                  │Officer Leaves│
                                  │Jail      │
                                  └──────────┘
```
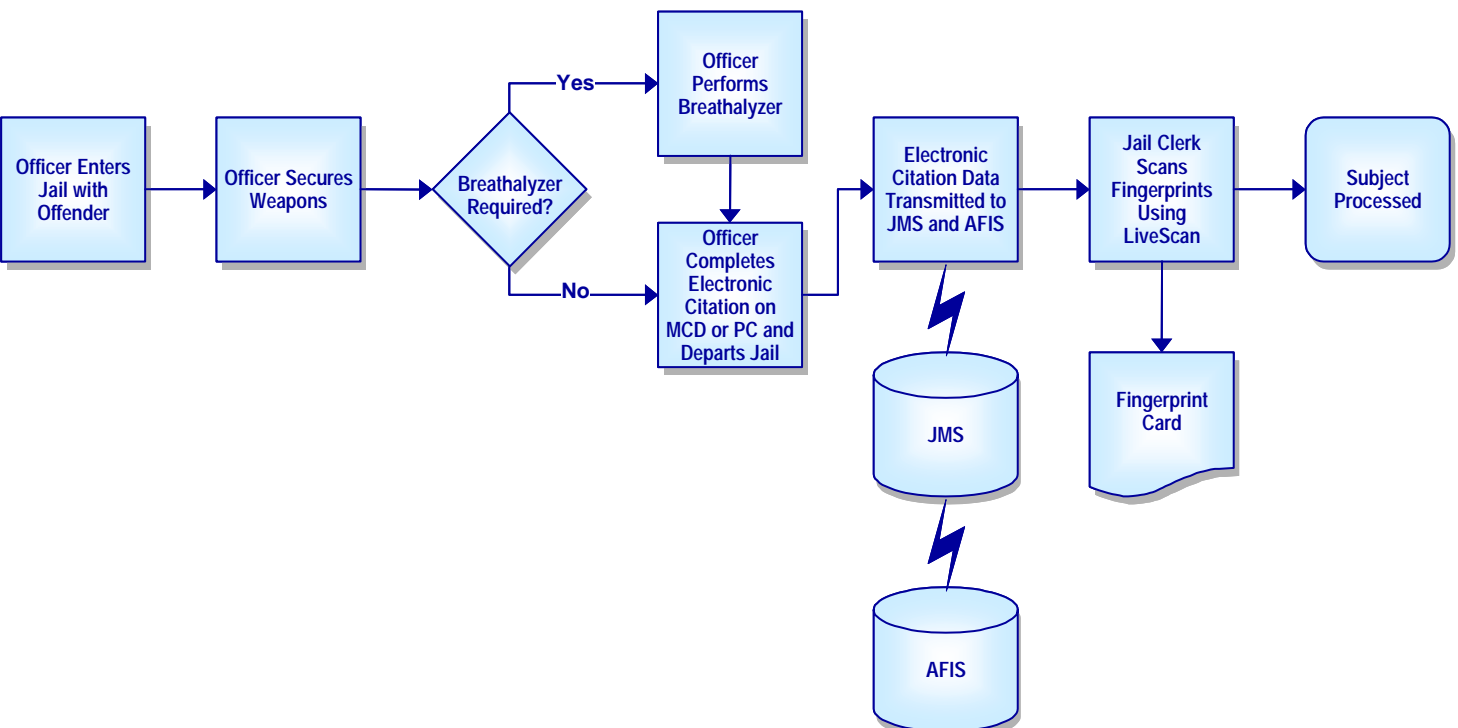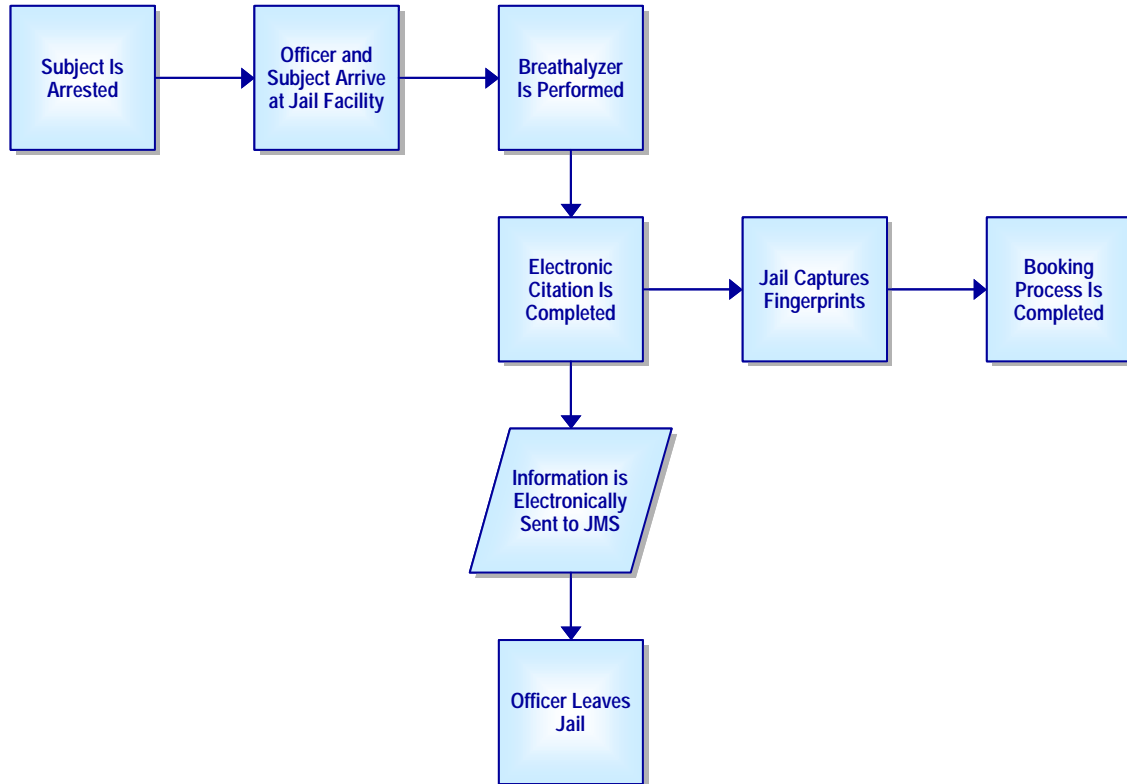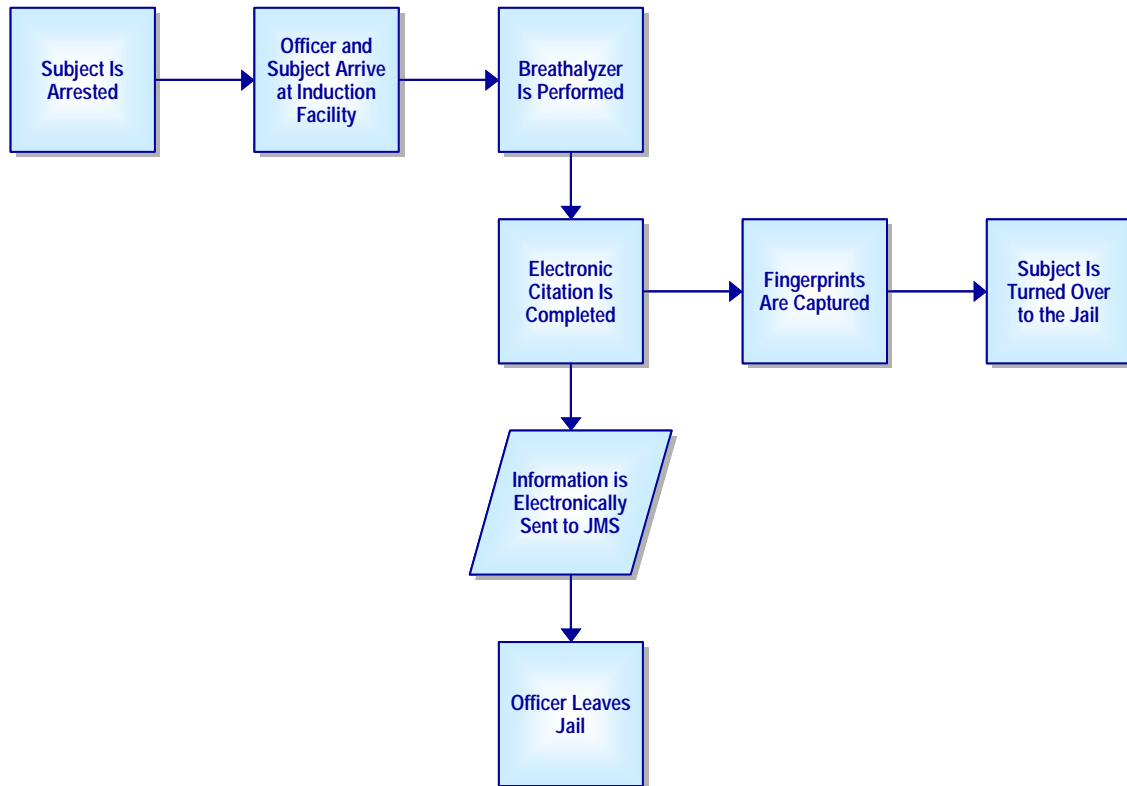
Exhibit B-3. Jailer-Centric Booking Process

Exhibit B-4. Officer-Centric Booking Process